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THE NAME OF THE WILD DILLY OF FLORIDA

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In recent studies, Gilly (Trop. Woods **73**: 1-22. 1943) and Cronquist (Bull. Torrey Bot. Club **72**: 550-552. 1945) have confirmed the earlier conclusion of Nuttall and Baker that the wild dilly (family *Sapotaceae*) of southern Florida and the Bahama Islands is congeneric with the sapodilla, *Achras Zapota* L., but both have adopted *Manilkara* Adans. for the generic name. For the wild dilly Sargent (Man. Trees No. Amer. Ed. 2, 819. 1922) used *Mimusops emarginata* (L.) Britton, and Sudworth (Check List Forest Trees U. S. 221. 1927) had *Mimusops parvifolia* (Nutt.) Radlk. A check of the nomenclature for the forthcoming Forest Service "Check List of the Native and Naturalized Trees of the United States, including Alaska" reveals that a new combination is needed under either *Achras* or *Manilkara*. After an evaluation of these generic names, a new combination for the wild dilly is proposed here in *Achras*.

Contemporary specialists in the *Sapotaceae* have restricted *Mimusops* L. (Sp. Pl. 349. 1753; Gen. Pl. Ed. 5, 165. 1754) to Asiatic species and have transferred the tropical American species of this genus, as well as others from Africa, Asia, and Oceanica, to the segregate genus *Manilkara* Adans. (Fam. Pl. **2**: 166. 1763). The latter was revived by Dubard (Notul. Syst. **3**: 45-46. 1914; Marseille Mus. Colon. Ann., sér. 3, **3**: 1-62. 1915), who proposed the first binomials in it. Other monographers adopting *Manilkara* include: Lecomte (Notul. Syst. **3**: 336-345. 1918), Lam (Bul. Jard. Bot. Buitenzorg, sér. 3, **7**: 1-289. 1925), and Baehni (Candollea **7**: 394-508. 1938).

For the sapodilla most recent authors have adopted *Achras Zapota* L. (Sp. Pl. 1190. 1753), though *Sapota Achras* Mill. (Gard. Dict. Ed. 8, *Sapota* No. 1. 1768) is used by a few, including Bailey and Bailey (Hortus Second 658. 1941). Cook (Contrib. U. S. Natl. Herb. **16**: 277–285, illus. 1913), Pittier (Contrib. U. S. Natl. Herb. **18**: 76–86, illus. 1914), Gilly, and others have discussed the controversial nomenclature. Gilly showed that *Achras* L. and *Manilkara* Adans. are connected by transitional forms and should be united. However, he adopted *Manilkara* Adans. for the combined genus, made the new combination *Manilkara Zapodilla* (Jacq.) Gilly for the sapodilla, and proposed *M. bahamensis* for the wild dilly. Some additional remarks may be in order.

Achras L. (Sp. Pl. 1190. 1753; Gen. Pl. Ed. 5, 497. 1754) is associated with the reference to Plumier (Nov. Pl. Amer. Gen. 43, pl. 4. 1703), as the genus was based upon Plumier's description and plate (Internat. Rules, Ed. 3, Art. 20, 42). Because Plumier's description was incomplete and did not mention the number of stamens, Linnaeus was unable to classify the genus in his sexual system. In the first five editions of the *Genera Plantarum* (1737 to 1754), Linnaeus placed this genus in the Appendix, and in the first four of these under "Fragmenta Plumieri". Plumier's figure, which Cook reproduced, contained a seed of sapodilla and fruits generally regarded as sapodilla, but the flower appeared to be different.

The next name, *Sapota* Mill. (Gard. Dict. Abridged. Ed. 4, v. 3. 1754), had a reference to Plumier but none to *Achras* L. and is considered a synonym, though Miller described the sapote instead. Miller first included *Sapota* in a supplementary volume of the *Gardeners Dictionary* published in 1739. Beginning with the 1759 edition (Miller, Gard. Dict. Ed. 7. 1759), the first cited by Gilly, *Achras* L. appeared as a synonym. In a somewhat later, posthumous edition (Miller, Gard. Bot. Dict. 1807), *Achras* L. finally was adopted.

After 1753 *Achras* was first accepted by Patrick Browne (Civ. Nat. Hist. Jamaica 200–201, pl. 19, fig. 3. 1756), who had eight species but no generic description nor binomial nomenclature. Loeffling (Iter Hispan. 186. 1758) emended Plumier's description of the sapodilla under the name *Achras* without binomial

nomenclature. With Loeffling's corrected description on the sapodilla, Linnaeus (Syst. Nat. Ed. 10, 2: 988, 1381. 1759) now published "*ACHRAS emendatione Loefflingii*" and placed the genus in the Hexandria Monogynia, now that the number of stamens was known. This emended generic description in almost the same form appeared in the next edition of the Genera Plantarum (Ed. 6, 173. 1764). Most subsequent authors have accepted *Achras* L. as emended.

Similarly, *Achras Zapota* L. (Sp. Pl. 1190. 1753), published in the appendix as the only species of the genus dating from 1753, has been adopted for the sapodilla by most later authors. Though most of the pre-Linnaean synonyms cited referred to the sapote, *Calocarpum Sapota* (Jacq.) Merr., Linnaeus afterwards emended the descriptions so that *Achras Zapota* L. (Syst. Nat. Ed. 10, 2: 988. 1759) and *A. Sapota* L. (Sp. Pl. Ed. 2, 470. 1762), a variant spelling, characterized the sapodilla and *A. mammosa* L. (Sp. Pl. Ed. 2, 469. 1762) the sapote.

The Linnaean Herbarium contains two specimens labeled *Achras Sapota*, according to Savage (Catal. Linn. Herb. 64. 1945). However, Jackson (Index Linn. Herb. 1912) indicated that this species was represented in the herbarium in the enumeration in 1767 but not in 1753 and 1755. Examination of the photographs of the Linnaean Herbarium in the Arnold Arboretum confirms that one specimen is the sapodilla, but the other is an unrelated plant, of which the specific epithet had been deleted afterwards by James E. Smith. Though Linnaeus did not have the modern concept of types, the specimen in the Linnaean Herbarium, which may be regarded as representative and as the type of both genus and species, agrees with present usage of the name. In the International Rules, *Achras Zapota*, the single species published in 1753, is listed as the standard species of the genus.

Linnaean names of 1753–1754 must not be rejected without sufficient cause, as they represent the foundation of nomenclature and have priority over all other names. Svenson (RHODORA 47: 273–302, 363–388, illus. 1945), Fernald (Jour. Arnold Arboretum 27: 386–394, illus. 1946), and others have noted that many Linnaean species consist of more than one species under present usage and have advocated retention under established custom (Art. 5) of Linnaean names based in part on the element

long accepted as typical. Where Linnaean genera and species represented broader concepts than at present and were composite groups, the original names must be retained for appropriate segregate elements (Art. 51, 52).

Achras L. and *Achras Zapota* L., names for the sapodilla, should not be cast aside merely because the earlier reference by Plumier contained incorrect description and drawings and because the synonyms cited under the species referred mostly to the sapote. *Achras* L., as emended by Loeffling and Linnaeus himself, should be retained under Article 50, which states that an alteration of the diagnostic characters of a group does not warrant a change in its name. Gilly's proposals that *Achras* L. (1753) be rejected as a *nomen ambiguum et confusum* (Art. 62, 64) and that *Achras* L. emend. Loebl. (1758) be rejected as a later homonym (Art. 61) seem unnecessary.

If future usage is not uniform, then the problem can be settled easily by making *Achras* L. emend. Loebl. (1758 or 1759) a *nomen conservandum*. Under Article 21 *Achras* L. clearly is eligible for conservation as a name that has come into general use in the fifty years following its publication in 1753 and in important works up to 1890. The first binomial in *Manilkara* Adans. was published in 1914, only 33 years ago and 161 years after *Achras Zapota* L. The forty or more species of *Manilkara*, nearly all transferred from *Mimusops*, can easily be transferred to the older and familiar genus without confusion.

Accordingly, a new combination in *Achras* is proposed below for the wild dilly. Its basonym, incidentally, is one of the two original species of *Sloanea* L. (Sp. Pl. 512. 1753; Gen. Pl. Ed. 5, 288. 1754). This Linnaean genus of *Elaeocarpaceae* cannot be rejected in spite of the fact that one of the two species placed in it by its author is now in the *Sapotaceae*.

ACHRAS emarginata (L.) Little, comb. nov. *Sloanea emarginata* L., Sp. Pl. 512. 1753. *Sapota achras* γ. *depressa* A. DC. in DC., Prodr. 8: 174. 1844. *Achras zapotilla* β *parvifolia* Nutt., No. Amer. Sylva 3: 28, pl. 90. 1849. *Mimusops Sieberi* [A. DC., sensu] Chapm., Fl. So. U. S. 275. 1860; A. Gray, Syn. Fl. No. Amer. 2 (1): 69. 1878; Sargent, Silva No. Amer. 5: 183, pl. 251. 1893. Non *Mimusops Sieberi* A. DC. in DC., Prodr. 8: 204. 1844. *Achras Zapotilla* var. *parviflora* Nutt. ex A. Gray, Syn. Fl. No. Amer. 2 (1): 69. 1878; pro synonym. (error for "*parvifolia*").

Mimusops parviflora Radlk., Sitzber. Bayer. Akad. der Wiss., Math.-Phys. Kl. **12**: 344. 1882. *Achras bahamensis* Baker in Hook., Icon. Pl. **18**: pl. 1795. 1888. *Mimusops floridana* Engl., Engl. Bot. Jahrb. **12**: 524. 1890. *Mimusops parvifolia* Radlk. ex Pierre, Not. Bot. Sapot. **37**. 1891; Pierre & Urban, Symb. Antill. **5**: 171. 1904; Britton & Shafer, No. Amer. Trees **782**, fig. 714. 1908. Non *Mimusops parvifolia* R. Br., Prodr. Fl. Nov. Holl. **1**: 531. 1810. Non *Mimusops parvifolia* Kurz, Forest Fl. Brit. Burma **2**: 124. 1877. *Mimusops bahamensis* (Baker) Pierre, Not. Bot. Sapot. **37**. 1891. *Mimusops depressa* (A. DC.) Pierre, Not. Bot. Sapot. **37**. 1891. *Mimusops emarginata* (L.) Britton, Torrey **11**: 129. 1911. *Manilkara parvifolia* (Nutt.) Dubard, Ann. Mus. Col. Marseille, sér. 3, **3**: 16. 1915 [1916?]. Non *Manilkara parvifolia* (Kurz) H. J. Lam, Bul. Jard. Bot. Buitenzorg, sér. 3, **7**: 269. 1925. *Manilkara emarginata* (L.) Britton & Wils., Sci. Surv. Porto Rico **6**: 366. 1926. Non *Manilkara emarginata* H. J. Lam, Bul. Jard. Bot. Buitenzorg, sér. 3, **7**: 241. 1925. *Manilkara bahamensis* (Baker) Lam & Meeuse, Blumea **4**: 351, 354. 1941; Gilly, RHODORA **48**: 164. 1946. *Manilkara emarginata* (L.) Britton & Wils. subsp. *typica* Cronq., Bull. Torrey Bot. Club **72**: 557. 1945. *Manilkara jaimiqui* (Wright) Dubard subsp. *emarginata* (L.) Cronq., Bull. Torrey Bot. Club **73**: 467. 1946.

The wild dilly has an involved nomenclature, as revealed by the detailed synonymy above. It was discovered in the Bahamas by Catesby who published a description with colored plate (Nat. Hist. Carol. Baham. **2**: 87, pl. 87. 1733). *Sloanea emarginata* L. was based upon Catesby's citation and is not represented in the Linnaean Herbarium. Apparently the name was overlooked until 1911, when it was transferred as *Mimusops emarginata* (L.) Britton. Previously, the wild dilly had been included in the West Indian species, *Mimusops Sieberi* A. DC., or designated as *Mimusops parvifolia* Radlk.

FOREST SERVICE,
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PENSTEMON GRACILIS Nutt., var. **wisconsinensis** (Pennell), n. comb. *P. wisconsinensis* Pennell, Mon. Acad. Nat. Sci. Phila. i. 234 (1935). *P. gracilis* [subsp.] *wisconsinensis* Pennell, l. c. 632.

This name has been used in the Spring Flora of Wisconsin, 1938 and 1947, but without proper validating synonymy.—N. C. FASSETT, University of Wisconsin.